

In the Claims:

Please cancel existing claims 1-43 and add new claims 44-55.

Claims 1-43 (canceled)

Please add new claims 44-55 as follows:

44. (New) A method of capturing an image comprising the steps of:
emitting light in a first location;
transmitting the emitted light from the first location to a second location
with an optical fiber;
illuminating a first scene at the second location by optically scanning the
transmitted light in a selected scan pattern;
capturing light reflected from the first scene in response to the scanned
light;
placing a reflector within an area illuminated by the scanned light from the
first scene;
acquiring light from the reflector;
transmitting the captured light from the first scene and the acquired light
from the reflector to a third location remote from the second location; and
at the third location, constructing the image from the transmitted captured
light from the first scene responsive to the acquired light from the reflector.
45. (New) The method of claim 44 further comprising steps of generating a
synch signal indicative of a scanning orientation in the third location.
46. (New) The method of claim 44 wherein transmitting the captured light
and the acquired light includes transmitting the acquired and captured light through a
common fiber.
47. (New) A method of producing an image of a remote location, comprising
the steps of:
transmitting light to the remote location with a first optical fiber;

illuminating the remote location by scanning the illuminating light over the remote location with a scanner;
capturing light reflected for the remote location;
transmitting the captured light to a second location separate from the remote location with a second optical fiber; and
constructing the image from the transmitted received light.

48. (New) The method of claim 47 further including optically detecting a scanning portion of the scanner.

49. (New) The method of claim 48 wherein optically detecting the scanning portion light includes:
capturing synchronizing light at the remote location; and
transmitting the captured synchronizing light to the second location with an optical fiber.

50. (New) The method of claim 49 wherein the synchronizing light is a portion of the captured reflected light.

51. (New) The method of claim 50 further comprising the step of illuminating the remote location.

52. (New) An apparatus for remotely imaging a region, comprising:
a light source;
a first fiber having an input end coupled to the light source and an output end;
a scanner having input coupled to the fiber output and being alignable to the region, the scanner being configured to direct light from the output end through a scan pattern toward the region;
a first optical detector optically coupled to the first scanner and aligned to receive light from a location in the scan pattern;

a second optical detector configured to receive light from the region; and
decoding electronics coupled to the first and second optical detectors, the
decoding electronics being responsive to the first and second optical detectors to identify
information about the region.

53. (New) The apparatus of claim 52 wherein the scanner has a variable field
of view.

54. (New) The apparatus of claim 52 wherein the first optical detector is
aligned to receive light directly from the scanner.

55. (New) The apparatus of claim 52 wherein the first optical detector is
responsive to light in a visible wavelength.